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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/091,311  
Filing Date: March 04, 2002  
Appellant(s): KAPLAN, DIEGO

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George W. Luckhardt  
Reg. No. 50,519  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 09/26/2007 appealing from the Office action mailed 05/02/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6590887	Lee	08-1998
5249220	Moskowitz et al.	04-1991
5844922	Wolf et al.	01-1997

20010049289	Kim	05-2001
5859594	King et al.	09-1993
6539118	Murray et al.	08-1999

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claim rejections-35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 11-17 are rejected under 35 U.S.C 103(a) as being un-patentable over Lee (U.S. 6,590,887) in view of Moskowitz et al (U.S. 5,249,220)**

**Regarding claim 11:**

Lee discloses the invention substantially as claimed, including a system, which can be implemented in a computer hardware or software code for optimal Short Message Service (SMS) encoding in a wireless communications device having SMS capabilities, the system comprising:

Character encoding subsystem with input to accept the SMS message and an output to supply the SMS message in a character encoding format: (Lee disclose method for creating and transmitting encoded SMS from a digital mobile communication terminal with a SMS function.

In the Lee's digital mobile communication terminal, "an encoder/decoder" which shares functionality with "character encoding subsystem" as claimed, which implements SMS encoding process on received generated SMS message from PCS and then transmits encoded SMS into network: column 2, lines 38-43)

However, Lee does not explicitly disclose an optimizing subsystem which accepts n message, accepts evaluation control signal and supplies an optimizing signal responsive to message character encoding requirements prior to character encoding the message

In analogous art, Moskowitz discloses a method for generating encoded alphanumeric message in the fewest binary bits character encoding format for transmitting over wireless network; Moskowitz's system contains numbers of available different character encoding formats those are represented by numbers of binary bits. The binary bit character encoding formats are evaluated in order to select the fewest binary bit character encoding format for encoding transmitting message; it would have been obvious in the art to know that prior message encoding process implementing, encoding format should be selected: figures 14-19; column 3, lines 1-50; column 12, lines 1-10, lines 15-40; column 13, lines 40-45; column 7, lines 60-67; column 11, lines 67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Moskowitz's ideas of using selected the fewest binary bits character encoding format for encoding alphanumeric message into Lee's system in order to be able to employ a well-known standard with Lee's system for saving resource and development time and also to be able to reduce memory/bandwidth consumption, see (Moskowitz: column 2, lines 1-37)

**Regarding claim 12:**

In addition to rejection in claim 11, Lee- Moskowitz further discloses identifying character encoding format parameters including the number of bits needed to represent characters: (Moskowitz discloses encoding format must be identified while evaluating and selecting encoding format such as five bits, six bits ...ect. the smallest number of binary bits is chose to represent the message: column 12, lines 1-9; column 13, lines 34-45)

**Regarding claim 13:**

In addition to rejection in claim 12, Lee- Moskowitz further discloses method of determining a memory usage requirement, selects as the optimal encoding format with a minimum memory usage, and wherein the optimizing subsystem supplies the identity of the optimal encoding format in the optimizing signal: (Moskowitz discloses the encoding format is determined such as five bits, six bits ...ect. the smallest number of binary bits is chose to represent the message: (column 12, lines 1-9; column 13, lines 34-45)

**Regarding claim 14:**

This claim is rejected under rationale of claim 11

**Regarding claim 15:**

In addition to rejection in claim 14, Lee- Moskowitz further discloses a memory circuit has an input to accept the encoded SMS message for storage and an output to supply the stored SMS message: (Lee discloses RAM and ROM to store predefined messages. The message read from the memory and displays on the display: column 1, lines 42-45, lines 22-45; column 3, lines 25-52)

**Regarding claim 17:**

In addition to rejection in claim 15, Lee- Moskowitz further discloses wherein the user interface has an input to accept the stored message for presentation: (Moskowitz: figure 4)

**Regarding claim 16:**

In addition to rejection in claim 15, Lee- Moskowitz further includes transceiver:  
(Moskowitz: figure 1, item 50)

**Claim 18 is rejected under 35 U.S.C 103(a) as being un-patentable over Lee-  
Moskowitz in view of Wolf et al. (U.S. 5,844,922)**

**Regarding claim 18:**

Lee- Moskowitz discloses the invention substantially as disclosed in claim 15, but does not explicitly teach seven-bit ASCII as a default optimal encoding format

In analogous art, Wolf discloses a constraint length of 7 is typical in encoding format, see (Wolf: column 1, lines 44-46; column 2, lines 3-12; column 3, lines 15-30; column 13, lines 63-64).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Wolf's ideas of using constraint length of 7 is typical as encoding format into Lee- Moskowitz's system in order to be able to employ a well-known standard with Lee's system for saving resource and development time

**Claims 19-21, 23-24 and 28-30 are rejected under 35 U.S.C 103(a) as being un-patentable Kim (U.S. 2001/0049289) in view of Moskowitz et al (U.S. 5,249,220)**

**Regarding claim 19:**

Kim discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for encoding a Short Message Service (SMS) message, the method comprising:

Encoding SMS message using a character SMS encoding format to generate an encoded message: (Kim discloses method for generating encoded SMS message for transmitting over the network; Kim's encoding MSM system inherently includes character MSM encoding format; also it would have been obvious in the art to know that prior encoding process implementation, encoding format should be selected: [0026]; [0029]-[0032]; [0040]; claim 1)

However, Kim does not explicitly disclose selecting the character encoding format based on a wireless device resource requirement of the encoded message: (Moskowitz discloses a method of testing and evaluating encoded message in different types of "numbers of bits character encoding formats" which shares functionality with "resource requirement of the encoded message"; and then the fewest binary bit character encoding format is selected for encoding transmitting message: figures 14-19; column 3, lines 1-50; column 12, lines 1-10, lines 15-40; column 13, lines 40-45; column 7, lines 60-67; column 11, lines 67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Moskowitz's ideas of using the fewest binary bits character encoding format for encoding alphanumeric message into Kim's system in order to be able to

employ a well-known standard with Kim's system for saving resource and development time and also to be able to reduce memory/bandwidth consumption see (Moskowitz: column 2, lines 1-37)

**Regarding claim 28:**

This claim is rejected under rationale of claim 19

**Regarding claims 20-21 and 29:**

Those claims are rejected under rationale of claim 19

**Regarding claims 24 and 30:**

In addition to rejection in claims 20 and 29, Kim-Moskowitz further discloses determining a memory usage requirement of the SMS message: (Moskowitz discloses a method of evaluating and selecting the fewest "binary bit" which is equivalent to "memory usage" encoding format as a predetermined format for transmitted message: column 12, lines 1-10, lines 15-40; column 13, lines 40-45; column 7, lines 60-67; column 11, lines 67)

**Regarding claim 23:**

In addition to rejection in claim 21, Kim-Moskowitz further discloses determining a number of bits need to represent characters in the available format: (Moskowitz discloses a method of evaluating and selecting the fewest "binary bit" which is equivalent to "memory usage" encoding format as a predetermined format for transmitted message: column 12, lines 1-10, lines 15-40; column 13, lines 40-45; column 7, lines 60-67; column 11, lines 67)

**Claims 26-27 are rejected under 35 U.S.C 103(a) as being un-patentable over Kim-Moskowitz in view of King et al. (U.S. 5,859,594)**

**Regarding claims 26-27:**

Kim-Moskowitz discloses the invention substantially as disclosed in claim 19, but does not explicitly teach receiving message at wireless device via user interface

In analogous art, King discloses “paging terminal” which is equivalent to “wireless device” receives messages via interface: (abstract; column 1, lines 15-27)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine King’s ideas of using receiving SMS via wireless device interface with Kim-Moskowitz’ s system in order to provide conveniences for users

**Claim 22 is rejected under 35 U.S.C 103(a) as being un-patentable over Kim-Moskowitz in view of Murray et al. (U.S. 6,539,118)**

**Regarding claim 22:**

Kim-Moskowitz discloses the invention substantially as disclosed in claim 21, but does not explicitly teach evaluating an English-language SMS message in ISO Latin 1, and Unicode formats as usable; and, determining the number of bits needed to represent characters in ISO Latin 1, and Unicode formats

However, in the same field of endeavor, with an analogous art, Murray discloses a system and method for evaluating character sets of message containing a plurality of character sets. Murray discloses a communication system includes “character table bank” stored in the system storage. “Characters table bank” contains many different code formats such as Unicode, “ISO-

8859-1" which is equivalent to "ISO Latin 1" and ASCII. Through out the "characters table bank", the communication system performs searching, evaluation and selecting the best code format such as for faster processing, see (Murray: column 1, lines 65-67; column 2, lines 3-30; column 4, lines 32-35, 42-46, 61-67; column 5, lines 16-24; column 6, lines 60-67; column 7, lines 1-4).

Thus, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Murray's ideas of code message in different code formats such as Unicode, "ISO-8859-1" with Kim-Moskowitz's system in order to determine the best code format in order to reduce bandwidth, memory utilization

**Claim 25 is rejected under 35 U.S.C 103(a) as being un-patentable over Kim-Moskowitz in view of Wolf et al. (U.S. 5,844,922)**

**Regarding claim 25:**

Kim-Moskowitz discloses the invention substantially as disclosed in claim 20, but does not explicitly teach selecting the optimal encoding format includes selecting seven-bit ASCII as a default optimal encoding format

In analogous art, Wolf discloses method of using length of 7 bit as encoding format: column 1, lines 44-46; column 2, lines 3-12; column 3, lines 15-30; column 13, lines 63-64).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Wolf's ideas of using constraint length of 7 is typical as encoding format into Kim-Moskowitz's system in order to be able to employ a well-known standard with Lee's system for saving resource and development time

**(10) Response to Argument**

Applicant argues that the applied references (Lee and Moskowitz):

- A. Do not teach “supplying an optimizing signal prior to character encoding of the SMS message”, in other words the prior art does not teach providing character encoding scheme prior to encoding SMS message.

As to point a., Examiner disagrees for two reasons; First, in light of specification (page 7-8, specially page 8, lines 1-7) suggests that the optimizing signal is in fact a control signal, which is being used to identify number of bits for encoding a single character. The number of bits to be used could be 7 bits <sup>or</sup> 8 bits in accordance with the types of characters, as exemplified in page 8 lines 10-15. Let turn attention to Moskowitz (col. 11, line 66 - col.12, line 55). Moskowitz clear teaches different numbers of the character coding for encoding message prior to its' transmission (lines 1-8), this section clearly teaches supplying signal prior to encoding message. Moskowitz further teaches the transmitter selects specific bit-scheme for encoding message, such as Four-bit encoding may be utilized when the message consists only 16 often-used characters (lines 19-21), this section clearly teaches the transmitter has optimizing encoding feature.

Further, Lee teaches a feature of encoding message before transmitting SMS message (Figure 1 and 2 and col. 2, lines 21-52).

- B. Do not teach “Character encoding subsystem with input to accept an SMS message”.

As to point b., Examiner disagrees; Lee clearly teaches this features. Let turn to Lee, in Figure 1, Lee teaches an encoder/decoder block 16, which represents the character encoding subsystem. The encoder couples to controller which in turn couples to keypad, i.e., input device for inputting message. These three blocks are connected together by the double head-arrow line which is a notorious representation of communication, includes INPUT signal. Further, Lee's figure 2 - block 41 clearly teaches SMS message is input to message transmission section, which is depicted in figure 1.

C. The combination of Lee and Moskowitz lacks of reasonable of success.

As to point c., Examiner disagrees; because there is no requirement that the combine references must yield the same result or resolve the same problem. “However, “[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant’s disclosure, such a reconstruction is proper.” In re McLaughlin 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971). Applicants may also argue that the combination of two or more references is “hindsight” because “express” motivation to combine the references is lacking. However, there is no requirement that an “express, written motivation to combine must appear in prior art references before a finding of obviousness.” See Ruiz v. A.B. Chance Co., 357 F.3d 1270, 1276, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004). \*\*>See MPEP § 2141

and § 2143 for guidance regarding establishment of a prima facie case of obviousness.<” [MPEP 2145[R-6] [X] [A]]

Further, the Supreme Court in KSR identified a number of rationales to support a conclusion of obviousness, such as

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.”

[MPEP 2145[R-6] [X] [A]]

For this instance combining Lee and Moskowitz is reasonable because they are in the same field and yield predictable result that in providing different encoding scheme and selecting a proper one would improve system efficiency.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

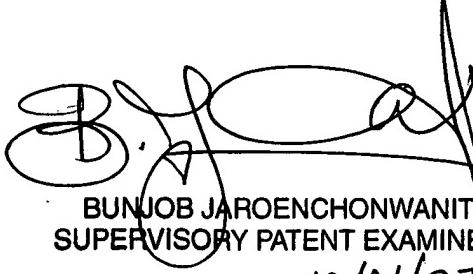
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